

**IN THE CLAIMS**

The following is a complete listing of claims with a status identifier in parenthesis.

1. (Cancelled)

2. (Currently Amended) A method of controlling call admission in a communications network, comprising:

calculating a load level as a function of at least one of a change in difference between a current measured power and a previous measured power and a change in difference between a current number of users and a previous number of users; and

controlling call admission based on the calculated load level, wherein said calculating step recursively calculates updated load levels.

3. (Previously Amended) A method of controlling call admission in a communications network, comprising:

calculating a load level as a function of at least one of a change in measured power and a change in number of users; and

controlling call admission based on the calculated load level, wherein said calculating step estimates load level as a function of a measured change in power and a change in number of users.

4. (Original) The method of claim 3, wherein said calculating step estimates load level,  $L_{new}$ , by solving:

$$L_{new}(N_{new}, P_{new}) = \frac{N_{new} x(P_{new} - P_{old})}{N_{new} x(P_{new} - P_{old}) + P_{old} x(N_{new} - N_{old})},$$

where  $N_{new}$  and  $N_{old}$  are current and previous number of users values respectively, and  $P_{new}$  and  $P_{old}$  are current and previous power measurements respectively.

5. (Currently Amended) A method of controlling call admission in a communications network, comprising:

calculating a load level as a function of at least one of a change in previous and current measured powers and a change in or previous and current number of users; and

controlling call admission based on the calculated load level,  
wherein said calculating step recursively updates load level as a function of a change in previous and current number of users.

6. (Currently Amended) A method of controlling call admission in a communications network, comprising:

calculating a load level as a function of at least one of a change in measured powers and a change in or previous and current number of users; and

controlling call admission based on the calculated load level,  
wherein said calculating step recursively updates load level as a function of a change in previous and current measured powers.

7. (Original) The method of claim 5, wherein said calculating step estimates load level,  $L_{new}$ , by solving:

$$L_{new} = L_{old} \times \frac{N_{new}}{N_{old}},$$

where  $L_{old}$  is a previously calculated load level, and  $N_{new}$  and  $N_{old}$  are current and previous number of users values respectively.

8. (Original) The method of claim 6, wherein said calculating step estimates load level,  $L_{new}$ , by solving:

$$L_{new} = 1 - \frac{P_{old}}{P_{new}} \times (1 - L_{old}),$$

where  $L_{old}$  is a previously calculated load level, and  $P_{new}$  and  $P_{old}$  are current and previous power measurements respectively.

9. (Previously Amended) The method of claim 6, further comprising:  
verifying a calculated load level before using the calculated load level in said controlling step.

10. (Original) The method of claim 9, wherein said verifying step calculates an estimated power measurement,  $P_{new'}$ , based on the calculated load level,  $L_{new}$ , by solving:

$$P_{new'} = \frac{P_{old} (1 - L_{old})}{(1 - L_{new})},$$

where  $P_{old}$  is a previous power measurement and  $L_{old}$  is a previously calculated load level, said verifying step comparing  $P_{new'}$  with an actual power measurement,  $P_{new}$ , to determine whether  $L_{new}$  is reasonably accurate.

11. (Original) The method of claim 10, wherein, when said verifying step indicates that the  $P_{new'}$  is not sufficiently close to  $P_{new}$ , said calculating step calculates load level by solving:

$$L_{new} = 1 - \frac{P_{old}}{P_{new}} \times (1 - L_{old}).$$

12. (Cancelled)

13. (Currently Amended) A system of controlling call admissions in a communications network, comprising:

load calculating means for calculating a load level as a function of at least one of a change in previous and current measured powers and a change in or previous and current number of users; and

control means for controlling call admission based on the calculated load level,

wherein said load calculating means recursively calculates updated load levels.

14. (Previously Amended) A system of controlling call admissions in a communications network, comprising:

load calculating means for calculating a load level as a function of at least one of a change in measured power and a change in number of users; and control means for controlling call admission based on the calculated load level,

wherein said load calculating means estimates load level as a function of a change in measured power and a change in number of users.

15. (Original) The system of claim 14, wherein said load calculating means estimates load level,  $L_{new}$ , by solving:

$$L_{new}(N_{new}, P_{new}) = \frac{N_{new} x(P_{new} - P_{old})}{N_{new} x(P_{new} - P_{old}) + P_{old} x(N_{new} - N_{old})},$$

where  $N_{new}$  and  $N_{old}$  are current and previous number of users values respectively, and  $P_{new}$  and  $P_{old}$  are current and previous power measurements respectively.

16. (Currently Amended) A system of controlling call admissions in a communications network, comprising:

load calculating means for calculating a load level as a function of at least one of a change in previous and current measured powers and a change in or previous and current number of users; and

control means for controlling call admission based on the calculated load level,

wherein said load calculating means recursively updates load level as a function of a change in previous and current number of users.

17. (Currently Amended) A system of controlling call admissions in a communications network, comprising:

load calculating means for calculating a load level as a function of ~~at least one of a change in previous and current measured powers and a change in or previous and current~~ number of users; and

control means for controlling call admission based on the calculated load level,

wherein said load calculating means recursively updates load level as a function of ~~a change in previous and current measured powers~~.

*B1*  
18. (Original) The system of claim 16, wherein said load calculating means estimates load level,  $L_{new}$ , by solving:

$$L_{new} = L_{old} \times \frac{N_{new}}{N_{old}},$$

where  $L_{old}$  is a previously calculated load level, and  $N_{new}$  and  $N_{old}$  are current and previous number of users values respectively.

19. (Original) The system of claim 17, wherein said load calculating means estimates load level,  $L_{new}$ , by solving:

$$L_{new} = 1 - \frac{P_{old}}{P_{new}} \times (1 - L_{old}),$$

where  $L_{old}$  is a previously calculated load level, and  $P_{new}$  and  $P_{old}$  are current and previous received power measurements respectively.

20. (Previously Amended) The system of claim 17, further comprising:  
verifying means for verifying a calculated load level before said control means  
uses the calculated load level.

21. (Original) The system of claim 20, wherein said verifying means  
calculates an estimated power measurement,  $P_{new'}$ , based on the calculated load  
level,  $L_{new}$ , by solving:

$$P_{new'} = \frac{P_{old} (1 - L_{old})}{(1 - L_{new})},$$

where  $P_{old}$  is a previous power measurement and  $L_{old}$  is a previously  
calculated load level, said verifying means comparing  $P_{new'}$  with an actual power  
measurement  $P_{new}$  to determine whether  $L_{new}$  is reasonably accurate.

22. (Original) The system of claim 21, wherein, when said verifying means  
indicates that the  $P_{new'}$  is not sufficiently close to  $P_{new}$ , said calculating means  
calculates load level by solving:

$$L_{new} = 1 - \frac{P_{old}}{P_{new}} \times (1 - L_{old}).$$

23. (Currently Amended) the system of claim 12 13, further comprising:  
input means for receiving power measurements and number of user values.

24. (Currently Amended) A method of controlling call admission in a  
communications network, comprising:

calculating a load level as a function of ~~a change in~~ previous and current measured powers; and

controlling call admission based on the calculated load level.

25. (Currently Amended) A method of controlling call admission in a communications network, comprising:

calculating a load level as a function of ~~at least one of a change in~~ previous and current number of users; and

controlling call admission based on the calculated load level.

*B 1*  
26. (Currently Amended) A system of controlling call admissions in a communications network, comprising:

load calculating means for calculating a load level as a function of ~~a change in~~ previous and current measured power; and

control means for controlling call admission based on the calculated load level.

27. (Currently Amended) A system of controlling call admissions in a communications network, comprising:

load calculating means for calculating a load level as a function of ~~a change in~~ previous and current number of users; and

control means for controlling call admission based on the calculated load level.